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Abstract

A method of using micromechanical devices as sensors for detecting chemical interactions between naturally occurring bio-polymers which are non-identical binding partners is provided. The method is useful whether the reactions occur through electrostatic forces or other forces. Induced stress, heat, or change in mass is detected where a binding partner is placed on a cantilever for possible reaction with an analyte molecules (i.e., a non-identical binding partner). The method is particularly useful in determining DNA hybridization but may be useful in detecting interaction in any chemical assay.